

STATE OF SOUTH CAROLINA

Application of

**Duke Energy Carolinas, LLC
for Approval of Energy Efficiency Plan Including
an Energy Efficiency Rider and Portfolio of Energy
Efficiency Programs.**

**BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA**

COVER SHEET

**DOCKET
NUMBER: 2007-358-E**

(Please type or print)

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DOCKETING INFORMATION (Check all that apply)

☐ **Emergency Relief demanded in petition** ☐ **Request for item to be placed on Commission's Agenda expeditiously**

☒ **Other:**

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input type="checkbox"/> Letter	<input type="checkbox"/> Request
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certificatio
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input checked="" type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigatio
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter
<input type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena
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<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input checked="" type="checkbox"/> Other: Testimony of Jane Sadowsky
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest	
<input type="checkbox"/> Other:	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit	
	<input type="checkbox"/> Late-Filed Exhibit	<input type="checkbox"/> Report	

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2007- 358 - E

In re:)	
Application of Duke Energy Carolinas, LLC)	TESTIMONY OF
For Approval of Energy Efficiency Plan)	JANE SADOWSKY FOR
Including an Energy Efficiency Rider and)	DUKE ENERGY CAROLINAS
Portfolio of Energy Efficiency Programs)	
)	

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1 **Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITHIN**
2 **YOUR COMPANY.**

3 A: My name is Jane Sadowsky, and my business address is 55 East 52nd Street, 38th
4 Floor, New York, NY. I am a Senior Managing Director at Evercore Partners.

5 **Q: PLEASE DESCRIBE YOUR POSITION AND EMPLOYER.**

6 A: At Evercore Partners, I am the Partner charged with developing and growing an
7 advisory business focused on the power and utility sectors. Established in 1996,
8 Evercore Partners is a leading investment banking boutique providing advisory
9 services to prominent multinational corporations on significant mergers,
10 acquisitions, divestitures, restructurings, and other strategic corporate
11 transactions. Evercore also has a successful investment management business
12 through which it manages private equity and venture capital funds for institutional
13 investors. Evercore serves a diverse range of clients and investors around the
14 world from offices in New York, Los Angeles, San Francisco, London, Mexico
15 City, and Monterrey.

16 **Q. PLEASE DESCRIBE BRIEFLY YOUR EDUCATIONAL AND**
17 **PROFESSIONAL BACKGROUND.**

18 A: I received a Bachelor's Degree in liberal arts from the University of Pennsylvania
19 (1983) and a Masters in Business Administration from The Wharton School at the
20 University of Pennsylvania (1989). Prior to assuming my current position as a
21 Senior Managing Director at Evercore Partners in June 2006, I was a Managing
22 Director and Co-Head of North America Power Investment Banking for
23 Citigroup. I joined Citigroup as a Managing Director in July 2000 from

Donaldson, Lufkin & Jenrette, where I had been an investment banker focusing on the power and utility industry since receiving my MBA in 1989.

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A: The purpose of my testimony is to: (1) provide a financial perspective on some of the fundamental ways in which investors value the common stocks of regulated utility companies, also known as investor owned utilities (“IOUs”); and (2) offer my expert opinion as to how investors will receive Duke Energy Carolinas, LLC’s (“Duke Energy Carolinas” or “Company”) Energy Efficiency Plan, if approved by the Public Service Commission of South Carolina (the “Commission”).

Q: HAVE YOU REVIEWED DUKE ENERGY CAROLINAS’ PROPOSAL IN THIS PROCEEDING?

A: Yes, I have reviewed the Company’s Energy Efficiency Plan.

Q: WHAT IS YOUR UNDERSTANDING OF DUKE ENERGY CAROLINAS’ ENERGY EFFICIENCY PLAN?

A: My understanding of the Energy Efficiency Plan, including the “save-a-watt” regulatory model, is that Duke Energy Carolinas is responding to the increasingly apparent national focus on energy efficiency with a proposal that achieves several objectives:

1. The save-a-watt proposal places the responsibility for a significant portion of capital expenditure for energy efficiency¹ investment in the hands of the investor-owned utility (“IOU”), Duke Energy Carolinas. Because the Company maintains scale advantages on the procurement side, cost of capital

¹ The term “energy efficiency,” as used in this testimony, includes both energy efficiency/conservation and demand response measures.

1 advantages on the financing side, a comprehensive understanding of the local
2 utility network, and an unwavering commitment to making the needed
3 expenditures (versus placing the investment decisions in the hands of each
4 individual customer who may have many alternate uses for their free cash),
5 the responsibility for capital expenditures logically falls to the utility.

6 2. The save-a-watt proposal asks the Commission to consider the cumulative
7 megawatts “saved” by the demand side reductions resulting from the
8 Company’s energy efficiency expenditures in the same way the Commission
9 would consider a supply-side solution (*e.g.*, construction of additional
10 generation assets and ancillary infrastructure needed to support those
11 generation assets). The save-a-watt proposal values the demand-side solution
12 (energy efficiency) based upon costs avoided from a similar reduction on the
13 supply-side (plant and infrastructure construction), but incorporates a 10%
14 discount.

15 3. The save-a-watt regulatory model recognizes that there are several societal
16 benefits to demand reduction, including, most prominently, the reduction of
17 air pollution, decreased reliance on new non-renewable resources, and the
18 reduction in the use of existing non-renewable energy resources. The model
19 makes no effort to quantify the positive societal externalities as a result of
20 Duke Energy Carolinas’ action. The proposal does, however, ask that the
21 Commission recognize and compensate the IOU for approximately the
22 comparable supply-side value created, in the form of rate base relief valued in
23 terms of 90% of the avoided cost.

1 4. The save-a-watt model recognizes that the risks inherent in meeting South
2 Carolina's electricity demand through new construction (e.g., cost overruns,
3 technical problems, and "NIMBY" delays) are reduced by implementing the
4 save-a-watt solution.

5 5. The save-a-watt model enables Duke Energy Carolinas to offer its retail
6 electric customers both greater energy efficiency and a 10% discount over
7 what the supply-side solution would be.

8 **Q: BASED ON YOUR EXPERIENCE AND EXPERTISE, WHAT IS YOUR**
9 **OPINION AS TO WHAT INVESTORS DEMAND FROM UTILITY**
10 **COMPANIES?**

11 A. The common stock investor base of IOUs differs from that of the market as a
12 whole. Most notably, approximately 35% of the typical IOU utility is held by
13 retail (that is, individual) investors versus approximately 24% (weighted) of the
14 market as a whole.² Many retail investors invest in their local utility. IOU
15 investors are most concerned with:

- 16 1. Dividend policy/yield;
- 17 2. Stable and predictable earnings streams (lower risk in exchange for lower
18 growth);
- 19 3. Solid management team who understands local regulations and has good
20 relationships with regulators;
- 21 4. Compelling fundamental story supported by a sustainable (and growing)
22 dividend;

² Source: Duke Energy Corporation Investor Relations
Direct Testimony: JANE SADOWSKY
Duke Energy Carolinas, LLC
PSCSC Docket No. 2007-358-E

1 5. Rate of reinvestment into utility assets; and

2 6. Social and environmental responsibility.

3 **Q: HOW IMPORTANT TO INVESTORS IS REGULATORY CERTAINTY?**

4 A: Regulatory certainty is an important criterion for utility investors. There are
5 numerous resources – notably Regulatory Research Associates, which is a
6 subscription service -- and abundant Wall Street research coverage that focus
7 attention on the regulatory “climate” of each IOU’s jurisdiction(s) and provide a
8 litany of rate case information and other key regulatory outcomes. This
9 information is utilized by investors in determining the riskiness of a company’s
10 future earnings from regulatory operations and thereby helping to inform their
11 investment decisions.

12 **Q: HOW IMPORTANT TO INVESTORS IS THE OPPORTUNITY FOR THE**
13 **UTILITY TO RECOVER ITS PRUDENT COSTS PLUS A REASONABLE**
14 **RETURN ON ITS INVESTMENTS?**

15 A: The opportunity to recover prudently incurred costs, and a reasonable return on
16 their investment, is very important to investors. As indicated above, utility
17 investors are inherently low risk investors who place enormous value on an IOU’s
18 dividend. Utility investors understand that they are trading high growth for lower
19 risk plus income (via the dividend). That being stated, the visibility and reliability
20 of an IOU’s ability to generate earnings from prudent investments underpins the
21 sustainability of the income stream and ultimately the dividend.

22 Furthermore, the stable and predictable earnings stream that utility
23 investors value is put into question when the IOU makes prudent investments that

1 are either disallowed partially or entirely or are not allowed a reasonable return.
2 In those instances, the Company has invested the capital but there is no offsetting
3 revenue to compensate for those costs, and earnings decline. This has immediate
4 implications on the IOU's stock price; if the investors surmise that the regulatory
5 environment will prohibit future cost offsets, the stock price dislocation can be
6 dramatic and long-lived, raising the IOU's cost of capital, which can lead to
7 further deterioration of earnings.

8 **Q: HOW IMPORTANT TO INVESTORS IS THE LEVEL OF GROWTH IN**
9 **UTILITY EARNINGS?**

10 **A:** A reasonable level of earnings growth is also important to investors. As stated
11 above, an unusually large proportion of IOU investors is comprised of retail
12 investors. Many of those retail investors are in the particular IOU's service
13 territory, and own the stock because of their familiarity with the company and its
14 services. These investors are generally long-term holders and less apt to trade the
15 stock due to relative underperformance. The balance of investors, however, will
16 select among comparable investments based on many factors, including total
17 return, which, simply put, is the combination of capital returned (dividends) and
18 capital appreciation (stock price performance). Therefore, in evaluating
19 comparable IOUs for potential investment (as well as evaluating other non-utility
20 companies for potential investment), both dividend yield and earnings per share
21 ("EPS") growth dynamics matter greatly. Moreover, an investor will assess the
22 sustainability of both the dividend and the EPS growth, looking at such factors as
23 profitability, regulatory relationships, recent rate case outcomes, opportunities for

1 growth, capital efficiency (e.g., IOU's ability to raise the capital required to make
2 the investments at a reasonable price), and management credibility.

3 To illustrate this point, I have analyzed the proportion of the
4 price/earnings ratio ("P/E ratio")³ of several regulated utilities using a dividend
5 discount model⁴ to determine the relative importance to investors between the
6 dividend payment and growth. In general, a higher P/E suggests that investors are
7 expecting higher earnings growth in the future compared to companies with a
8 lower P/E. On a relative basis, future growth is a riskier value driver thesis than
9 current and sustained dividends. The utility companies profiled are First Energy,
10 Southern Company, Progress Energy, Duke Energy, Dominion, DTE Energy,
11 Pacific Gas & Electric, AEP, Xcel Corporation, ConEd, and Ameren Corporation.
12 These companies represent the full, current list of U.S. IOUs with equity market
13 capitalization greater than \$5 billion that are considered by the investing universe
14 to have predominantly regulated businesses. The results in Figure 1 indicate that
15 in eight out of eleven of the companies analyzed, growth was a more important
16 contributor to stock price than dividend; in one case (Progress Energy) dividends
17 were more important to stock price; and in two cases (ConEd and Ameren
18 Corporation), both were equally important to stock price.

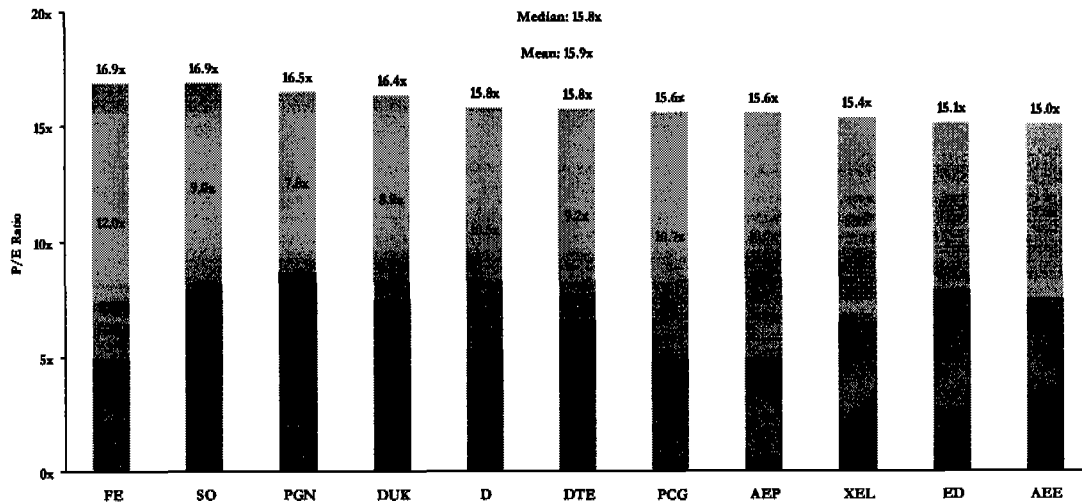
³ A valuation ratio of a company's current share price compared to its per share earnings. A P/E ratio is calculated as: market value per share / earnings per share.

⁴ A procedure for valuing the price of a stock by using predicted dividends and discounting them back to present value. The idea is that if the value obtained from the DDM is higher than what the shares currently are trading at, then the stock is undervalued.

$$\text{Value of Stock} = \frac{\text{Dividend per share}}{\text{Discount Rate} - \text{Dividend growth rate}}$$

Figure 1

Regulated Utility 2008E P/E: Proportion of Growth v. Dividend



Source: FactSet, as of 12/05/07

Note: In all means and medians the high and low figures of the range are excluded. The P/E ratio of each company is broken down by the fraction that is allocated to a constant dividend payment and the fraction that is allocated to growth. The top of each bar in Figure 1 is the growth portion and the bottom is the dividend portion.

Q: HOW IMPORTANT TO INVESTORS IS THE MAGNITUDE OF RISK TAKEN ON BY THE UTILITY?

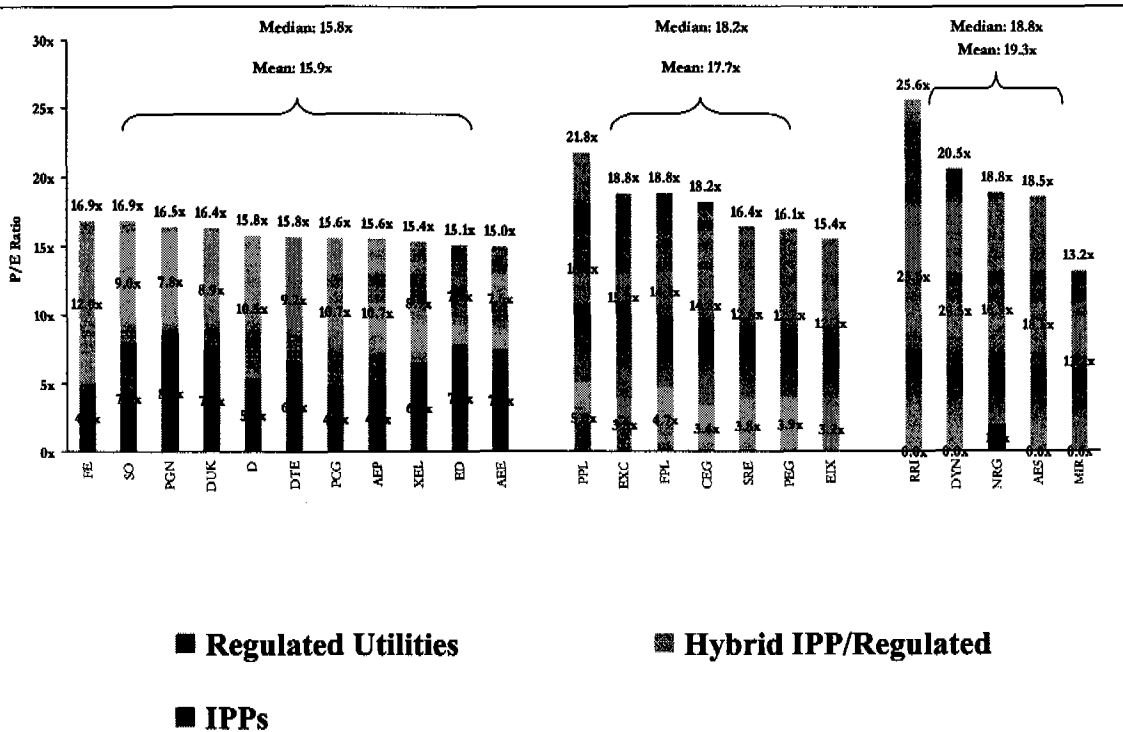
A: As stated above, investors in IOUs are seeking dividends and stable growth, and are, in general, more risk averse than investors seeking high growth. This can be demonstrated quantitatively by examining the relative valuations, as indicated through P/E ratios, of sectors that participate in the U.S. utility and power sectors.

In Figure 2, I have added two additional sectors to the Regulated Utility Dividend

1 Discount chart presented in Figure 1. The hybrid/regulated sector includes the
2 current universe of U.S. utility companies with equity market capitalization
3 greater than \$5 billion that are considered by the investing universe to have both
4 regulated utilities and large unregulated businesses. These companies are: PPL
5 Corporation, Exelon, Florida Power & Light, Constellation Energy, Sempra
6 Energy, Public Service Electric and Gas, and Edison International. Investors
7 perceive the unregulated businesses of these companies as being both riskier and
8 higher growth than the regulated utility businesses of this universe. The
9 Independent Power Producer ("IPP") sector includes all of the publicly traded
10 U.S. independent power companies, with the exception of Calpine Corporation,
11 which is currently in Chapter 11. These companies focus almost entirely on
12 unregulated generation and, with the exception of the AES Corporation -- the
13 owner of Indianapolis Power & Light -- have no U.S. regulated utility assets.
14 These companies are: Reliant Resources, Dynegy Corporation, NRG Corporation,
15 AES Corporation, and Mirant. Investors consider these companies to be "growth"
16 companies, and, with the exception of NRG, which has a dividend-paying
17 preferred stock outstanding, this universe is valued entirely on the basis of
18 growth. Investors consider IPPs the riskiest companies among these three sectors.
19 In Figure 2, I have indicated both the median and mean P/E ratios for each sector,
20 as well as calculated the proportion of value attributed to growth (which is risky)
21 versus dividends (which are stable), again using a dividend discount model.

Figure 2

Power and Utility 2008E P/E: Proportion of Growth v. Dividend



Source: FactSet, as of 12/05/07

Note: In all means and medians the high and low figures of the range are excluded. The P/E ratio of each company is broken down by the fraction that is allocated to a constant dividend payment and the fraction that is allocated to growth. The top of each bar in Figure 2 is the growth portion and the bottom is the dividend portion.

As would be expected, the P/E ratios increase as the riskiness of the sector and the proportion of value coming from growth versus dividends increases. The lowest P/E is associated with the regulated utilities and the highest P/E with the IPPs. If a particular IOU investor were to seek riskier investment opportunities

1 within the U.S. power and utility sector, there are numerous companies in which
2 he or she can invest.

3 **Q: IN YOUR VIEW, DOES DUKE ENERGY CAROLINAS' PROPOSED**
4 **SAVE-A-WATT REGULATORY MODEL PROVIDE THE UTILITY**
5 **WITH THE OPPORTUNITY FOR EARNINGS COMPARABLE TO AN**
6 **INVESTMENT IN SUPPLY-SIDE RESOURCES?**

7 **A:** In my view, the save-a-watt proposal does enable the utility to generate earnings
8 that are comparable to an investment in supply-side resources, as the metric for
9 valuing the energy efficiency contribution of save-a-watt is based on the avoided
10 cost of the supply-side resource.

11 **Q: IN YOUR VIEW, IS THERE A CORRELATION BETWEEN PROGRAM**
12 **INCENTIVES, SUCH AS THOSE IN THE PROPOSED SAVE-A-WATT**
13 **MODEL, AND INVESTMENT IN ENERGY EFFICIENCY PROJECTS?**

14 **A:** Historically, utilities have been compensated for their investments in energy
15 efficiency projects among their customers based on cost recovery of the IOU
16 investments and/or "lost revenue" recovery (that is, recovery by the IOU of the
17 margin it did not receive on the electricity that was not sold due to the energy
18 efficiency program) and a share of the savings created. The cost recovery
19 mechanism is generally through rate filings, thus adding a "regulatory lag," which
20 creates a delay between the timing of the expenditure and its recovery.
21 Jurisdictions characterized by these types of compensation mechanisms have
22 broadly and significantly lagged behind jurisdictions that incorporate some
23 manner of affirmative incentive to the IOU for energy efficiency programs in both

1 per capita expenditures for energy efficiency and in the results obtained. The
2 save-a-watt proposal rectifies this problem by creating incentives.

3 There are at least 25 states with “serious” utility ratepayer-funded energy
4 efficiency programs in operation, which genuinely attempt to achieve
5 measureable energy savings, including using strategies like providing tangible
6 incentives to customers to improve their energy efficiency.⁵ (Other widespread
7 approaches, such as listing conservation tips in mailers or online do not qualify as
8 a “serious” energy efficiency program.) All of the states with serious utility
9 ratepayer-funded energy efficiency programs in operation have some type of
10 approved cost-recovery mechanism, and in some cases, combinations of
11 mechanisms (*e.g.*, a public benefits charge plus the ability to recover additional
12 energy efficiency program costs in rates).⁶ By examining the programs of the
13 states with the highest per capita spending, a common commitment to
14 performance incentives for energy efficiency programs appears. Among the top
15 ten states, Vermont, Massachusetts, Connecticut, Rhode Island, New Hampshire,
16 Minnesota, and California have program incentives for utilities above and beyond
17 cost recovery. The incentives in Oregon and New Jersey are administered by
18 state organizations. Washington, alone, lacks both performance incentives for
19 utilities and a state-administered electricity sector.⁷ I cannot speculate on the
20 degree of causality of this relationship; program spending levels are generally the
21 result of a number of policy decisions and factors. However, it is clear that states

⁵ Source: Kusher, Martin, Dan York, and Patti Witte. “Aligning Utility Interests with Energy Efficient Objectives.” American Council for an Energy Efficient Economy. October 2006.

⁶ Source: Ibid.

⁷ Source: Ibid.

that are aggressively pursuing energy efficiency resources are also states that are likely to have enacted regulatory policies such as performance incentives.

Figure 3 summarizes energy efficiency activity in the top ten states of spending per capita.

Figure 3

Utility Spending on Energy Efficiency

Rank	State	2004 Total Spending (\$'000)	Per Capita Spending	Program Incentives		
				Cost Recovery	Direct Lost Revenues Recovery	Performance Incentives
1	Vermont	\$14,000	\$22.54	Yes--Electric systems benefit charge (SBC)	No	Yes
2	Massachusetts	133,326	20.81	Yes--Electric SBC	No	Yes
3	Oregon	62,888	17.51	Yes--Electric SBC	No	NA
4	Connecticut	58,098	16.60	Yes--Electric SBC	No	Yes
5	Washington	88,522	14.26	Yes--Electric rate or tariff surcharge	No	No
6	Rhode Island	13,990	12.95	Yes--Electric SBC	No	Yes
7	New Hampshire	15,120	11.64	Yes--Electric SBC	No	Yes
8	Minnesota	55,784	10.95	Yes--Electric (based on legislative mandate)	No	Yes
9	New Jersey	92,753	10.68	Yes--Electric SBC	No	NA
10	California	380,009	10.60	Yes--Electric SBC plus funding through rates	No	Yes

Source: ACEEE State Energy Efficiency Scorecard for 2006

Q: IS IT IMPORTANT TO INVESTORS THAT A UTILITY HAVE AN OPPORTUNITY TO ACHIEVE EARNINGS ON ENERGY EFFICIENCY INVESTMENTS COMPARABLE TO WHAT THEY WOULD HAVE FROM A POWER PLANT INVESTMENT? IF SO, WHY?

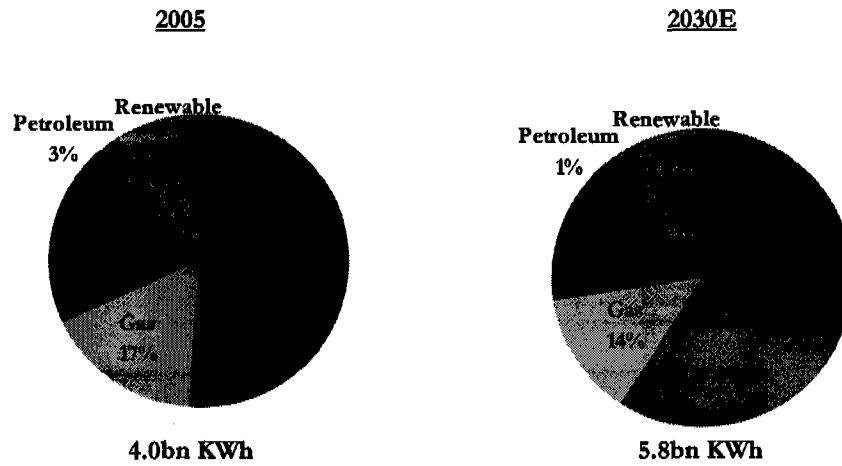
1 A: Yes. An opportunity to generate an earnings stream comparable to what an IOU
2 would earn from a power plant investment is important for several reasons:

3 1. Capital is a finite resource, and an IOU's continued access to capital at the
4 most efficient pricing possible is an important consideration to investors.
5 Management teams must prioritize and rank their capital projects to evaluate
6 the allocation of a company's resources relative to the investment
7 opportunities available. Given this dynamic, companies will prioritize supply-
8 side projects, which are allowed a regulatory rate of return on investment as
9 well as cost recovery of expenditures, including the financing costs, over
10 opportunities that allow cost recovery and/or lost revenue recovery only.

11 2. The U.S. electricity industry is about to undergo an unprecedented spate of
12 utility infrastructure investment encompassing transmission, distribution,
13 generation, and environmental remediation. This new investment will be
14 responsive both to significant historical underinvestment over the past several
15 decades and to the continued increase in demand for electricity as forecast by
16 the Department of Energy ("DOE") and other organizations. The DOE
17 expects the demand for power will grow 45% from current levels by 2030⁸, as
18 illustrated in Figure 4, which graphically illustrates what the U.S. government
19 believes will be the increase in the amount and type of U.S. generation assets
20 through 2030. Figure 5 reflects anticipated investment in all material aspects
21 of regulated power through 2010.

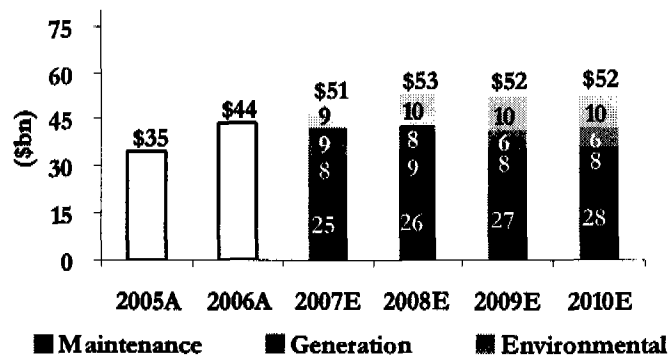
⁸ Source: Energy Information Administration
Direct Testimony: JANE SADOWSKY
Duke Energy Carolinas, LLC
PSCSC Docket No. 2007-358-E

Figure 4
U.S. Demand for Electricity by Segment



Source: Energy Information Administration

Figure 5
Capital Expenditure Projections - Regulated Utilities



1 Source: Analyst projections (May 2007)

- 2 3. In order for companies to allocate an appropriate share of capital to energy
3 efficiency programs, given the immense level of overall investment required,
4 the programs will need to generate earnings that are comparable in both size
5 and amount to an IOU's alternate use of capital (*e.g.*, supply-side resources).
- 6 4. From a broader point of view, the programs that are limited to cost recovery
7 and/or lost revenue adjustments simply do not have a historical track record of
8 "moving the needle" with respect to providing incentives to IOUs to
9 maximize energy efficiency within their jurisdictions. As discussed previously
10 in my testimony, at present there is an increasingly apparent national focus on
11 the criticality of energy efficiency and conservation, which is a significant
12 departure from even the recent past. Programs like save-a-watt align national
13 objectives more closely with the need for every company to invest its limited
14 capital in a way that achieves an optimal return on that capital.
- 15 5. Finally, at this point in time, energy efficiency programs do not, in general,
16 comprise a material contribution (positive or negative) to U.S. IOUs' current
17 earnings. As national priorities continue to shift toward conservation and
18 energy efficiency, it is likely that energy efficiency programs may start to
19 have more of an impact on the earnings of IOUs. At that point, the financial
20 implications of regulatory jurisdictional disparities in the design of energy
21 efficiency programs are likely to become apparent in the relative earnings and
22 growth rate of earnings among IOUs. Those IOUs operating in regulatory
23 regimes that allow them to replace most or all of the avoided supply-side

1 earnings (such as is contemplated under save-a-watt) are likely to be valued
2 more highly by equity investors than those IOUs who have received cost
3 recovery, lost revenue recovery, or a share of savings in their regulatory
4 design. This is because, in general, without any regulatory relief, energy
5 efficiency serves to reduce an IOU's revenues and earnings. Revenue
6 decreases stem from people using less electricity (on a comparable basis) and
7 earnings decreases stem from both having less revenue to cover the large fixed
8 costs of the typical IOU and from not replacing the earnings from supply-side
9 investments that do not need to be made due to the energy efficiency
10 programs. The save-a-watt design is responsive to many of these issues
11 inherent in energy efficiency while still offering a discount to customers on
12 avoided cost.

13 **Q: IN YOUR OPINION, HOW WILL INVESTORS VIEW THE RISKS OF**
14 **THE SAVE-A-WATT REGULATORY MODEL, IN TERMS OF THE**
15 **COMPANY ONLY GETING PAID IF IT ACHIEVES ACTUAL**
16 **SAVINGS?**

17 **A:** Investors would prefer that the payment is guaranteed, as this greatly enhances
18 their visibility into the IOU's future earnings stream, and, as discussed before,
19 investors in IOUs generally prefer certainty. That being said, investors will
20 compare the risks of achieving the save-a-watt objectives to the risks of building a
21 new power plant or other supply-side asset. (Those risks include budget and/or
22 time overruns, inability of the asset to achieve its stated rate of production or
23 efficiency, unplanned outages, etc.) Investors also will judge the probability of

1 the save-a-watt risks as compared to the supply-side risks. Overlaying their
2 assessment of relative risk, investors will make a judgment on the management
3 team and management's credibility in actualizing the save-a-watt objective. In
4 my view, it is reasonable that investors in an IOU (versus the customers) bear the
5 risks surrounding management credibility issues.

6 **Q: IN YOUR OPINION, WHAT ARE THE BENEFITS FOR INVESTORS**
7 **FROM THE SAVE-A-WATT MODEL?**

8 A: In my view, investors will benefit from the save-a-watt model as it gives them a
9 more certain methodology to calculate the financial impact of Duke Energy
10 Carolinas' energy efficiency investments. In addition, the save-a-watt model is
11 receiving attention in many regions of the U.S., as well as on a national level.
12 Successful promulgation of this program may enhance Duke Energy's standing as
13 a progressive, environmentally concerned utility, which may enable Duke Energy
14 to compete more effectively for a wide range of critical resources, including
15 talented personnel and efficiently priced capital.

16 On a secondary level, investors will gain from the societal benefits
17 mentioned previously: the reduction of air pollution, decreased reliance on
18 existing non-renewable resources, and the reduction in the construction of new
19 non-renewable energy resources. These secondary benefits will be more
20 pronounced for investors in Duke Energy Carolinas' direct service territory and
21 contiguous areas.

22 **Q: FROM YOUR PERSPECTIVE, WHAT ARE THE BENEFITS FOR**
23 **CUSTOMERS OF THE SAVE-A-WATT MODEL?**

1 A: In my view, the save-a-watt model has several benefits to customers:

- 2 1. The save-a-watt model has the potential to shift a significant portion of the
3 immediate burden of the capital investment required for energy efficiency
4 from the customer to the utility. The utility has a lower cost of capital than
5 most, if not all, customers, and should be able to invest in energy efficiency
6 on a scale that will promote investment in new technologies and innovations
7 that will increase further the efficiency and/or reduce the costs of future
8 energy efficiency products and services. Providing the customer with a cost-
9 effective path toward energy efficiency is one of the most obvious benefits of
10 the save-a-watt model for customers.
- 11 2. The proposal will maximize the amount of energy and demand-savings impact
12 available to the Duke Energy Carolinas' customers. Not all customers would
13 choose to invest their discretionary capital in energy efficiency products. The
14 save-a-watt model is designed to ensure that ultimately, all energy efficiency
15 investments will be made for which the marginal benefit is above the marginal
16 cost.
- 17 3. The mechanisms within the save-a-watt model, which ensure that Duke
18 Energy Carolinas achieves its financial thresholds only when the energy
19 efficiency achievements have been verified independently, provides
20 assurances to customers that they are receiving value for the amounts invested
21 and ultimately put into rate base. And the pricing of energy efficiency
22 investments at a rate equal to 90% of avoided supply-side costs ensures that

1 customers as a whole receive a discount when compared to the
2 implementation of supply-side alternatives.

3 4. The societal benefits noted above are also benefits to Duke Energy Carolinas'
4 customers.

5 **Q: DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

6 **A: Yes.**

**BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
DOCKET NO. 2007-358-E**

In Re:

Application of Duke Energy)
Carolinas, LLC for Approval of)
Energy Efficiency Plan Including an)
Energy Efficiency Rider and)
Portfolio of Energy Efficiency)
Programs)

CERTIFICATE OF SERVICE

This is to certify that I, Leslie L. Allen, a legal assistant with the law firm of Robinson, McFadden & Moore, P.C., have this day caused to be served upon the person(s) named below the **Testimony of Jane Sadowsky** in the foregoing matter by placing a copy of same in the United States Mail, postage prepaid, in an envelope addressed as follows:

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Dated at Columbia, South Carolina this 10th day of December, 2007.



Leslie L. Allen